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AUTHOR Brozo, William G.
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ABSTRACT

Methods for teaching students to recognize and manipulate structures of cohesion in reading materials are discussed. Teaching students to connect text involves a strategy that combines reading and writing in student- and teacher-directed activities. An example illustrates how the strategy can be applied with specific course content, a ninth-grade unit on the Civil War. In small groups, students generate three statements that come to mind related to the war, and the class identifies statements appropriate to the topic. Next, students discuss a list of connective words and then write a paragraph using connecting words to join together their statements about the war. Finally, students are provided a modified cloze passage from the text with existing connectives removed. Any sentences that could be connected are separated by a blank space, and students use the list to fill in the connecting words, after which the class discusses connectives that were chosen. It is suggested that creating cohesive statements helps students grow in syntactic maturity and metalinguistic awareness. A list of connectives and a sample cloze passage with missing connectives are included. (SW)

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College Reading and Learning Assistance

Technical Report 85-04

Teaching Students to Recognize and Manipulate Structures of Cohesion

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William G. Brozo

Northern Illinois University

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Teaching Students to Recognize and Manipulate Structures of Cohesion

Researchers have documented the developmental changes that occur across ages in children's metalinguistic awareness of written communication (Beilin & Lust, 1975; Chomsky, 1969; Yopp & Singer, 1984). It comes as no surprise that children's understanding of various facets of written language improves with age. Young readers direct a great deal of their attention to surface characteristics such as sounding letters and words (Polk & Goldstein, 1980; Perfetti & Beck, 1982). The mature reader, on the other hand, employs various reading and thinking strategies relative to what the reader chooses to consider intended, appropriate and important (Huffman, Edwards & Green, 1982) and integrates several viewpoints in constructing personal "truths" (Chall, 1983). While the former skills are necessary for success in learning to read (Liberman, Shankweiler, Liberman, Fowler & Fischer, 1977), the latter skills are essential for meeting the demands posed by the great variety and complexity of reading material encountered by students in secondary school and college.

At the heart of metalinguistic awareness is the ability to think inferentially. In order to make inferences, the reader is required to possess adequate background knowledge, knowledge of text structures and knowledge of causal relations between propositions and events (Trabasso, 1981). According to Anderson and Armbruster (1984), inconsiderate text lacks, among other

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things, coherence, that is, the connecting words and structures which explicate relationships among propositions and contribute to a smooth flow of meaning from one idea to the next. Incoherent text places a particularly heavy burden on the reader because it forces the reader to bridge many ideas inferentially which could have been tied together more explicitly by the author. The point here is that the more inferences the reader has to make, the greater the chance for the author's message to be misconstrued. Mature readers are better able to surmount problems posed by an incohesive surface structure than readers of less ability. Support for this contention comes from Johnston's (1981) study of reading comprehension test bias. He found that mature readers supply the missing links in text and as a result gain a deeper understanding of the material they read, as reflected in their superior performance on higher level test questions. Unfortunately, many upper level students do not understand the role of connectives in discourse or do not possess the degree of metalinguistic awareness necessary for mature reading (Marshall & Glock, 1978-1979). Based on the developmental nature of metalinguistic awareness and what we are learning about how good readers "connect" text, I have been promoting in my secondary reading courses methods for teaching students to recognize and manipulate structures of cohesion.

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Teaching Students to Connect Text

A linguistic connective can be defined as a syntactic structure that signals underlying logico-semantic relations and links propositions within or between sentences as a single word or a phrase (Walmsley, 1977). Interestingly, when a connective is used in a sentence it often has the effect of increasing the grammatical complexity of the sentence (Pearson & Camperell, 1981). Connectives are used to form compound sentences and subordinate clauses. Yet, in spite of this increased complexitiy, researchers have repeatedly found that when given a choice, readers prefer explicit descriptions of causal relations by the use of connectives over a simple surface form without causal relations stated (Katz & Brent, 1968; Marshall & Glock, 1978-1979; Pearson, 1974-1975). Nevertheless, in the ecology of academic learning, students are not given choices in this matter. They must read what teachers request them to read.

The process of teaching students to connect text involves an instructional strategy which combines reading and writing in student-directed and teacher-directed activities. The following example will illustrate how the instructional strategy can be used with specific course content. The lesson begins a unit on the Civil War in a ninth grade history class.

STEP ONE: In small groups, students are asked to generate three statments that come to mind related to the Civil War. Afterward, the whole class responds to each group's statements. Finally, the class decides on those statements they like and deem

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appropriate to the topic. The statments are written on the board. Here is a list of typical statments a class might derive.

*The Civil War was faught for many reasons.

*The major reason the Civil War was faught was to free slaves.

*The Civil War was not faught with a foreign country.

*American faught American in the Civil War.

*Abraham Lincoln was president.

*Many soldiers from both sides died.

Besides laying the foundation for manipulating connectives, this activity serves two additional purposes. First, it provides students a stimulus for prior knowledge activation. Discussions of the important role prior knowledge plays in reading comprehension are available in Anderson (1984) and Rumelhart (1981). Second, it stimulates group discussion and can increase student motivation. It is advised that the teacher remain nondirective but facilitate discussion by prodding, and asking open-ended questions.

STEP TWO: Students are given a list of connecting words (see Appendix) and the significance of the words is discussed. In order for students to see how these words operate in context, they are directed to go through a restricted section of their text and identify the connecting words from the list or any other connectives they find. The teacher and students then discuss the role each connective plays in context by considering the meaning of adjoining propositions and the relationship between the

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propositions that the connective links.

STEP THREE: After reforming their groups, students are asked to write a paragraph using connecting words to join together the statements they generated about the Civil War. Each group's method for connecting the statements is then shared with the whole class and differences are discussed relative to intended meaning. Here is the way one group might connect the statements.

> Although the Civil War was faught for many reasons, the major reason the Civil War was faught was to free slaves. The Civil War was not faught with a foreign country, rather, American faught American in the Civil War, and many soldiers from both sides died. At that time, Abraham Lincoln was president.

STEP FOUR: Students are provided a modified cloze passage from the textwith existingconnectives taken out and any sentences that could be connected separated by a blank space (see Appendix). They are asked to fill in the connecting words using their list. When finished, the class discusses their answers with individual students providing explanations and rationales for the particular connective they chose. The class discusses how meaning can be changed depending upon the connective used to join ideas and how different conncectives can be used to express the same idea. And finally, the teacher and the class determine whether or not the passage was made easier to understand after appropriate connectives were inserted. It has been my experience

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that students respond in unanimity saying the text passage read more "smoothly" and "made more sense."

At this point in the instructional sequence students are a bit more motivated and ready to read the textbook chapter on the Civil War. In addition, they embark on the reading assignment with a watchful eye for structures provided by the author that help explain how ideas are related. What is more, students are better able to recognize text that is incohesive and use their new knowledge about connectives to improve understanding.

Summary

Coherent text is easier to read and understand (Anderson & Armbruster, 1984) in spite of the fact that text surface structure is likely to become more complex (Pearson & Camperell, 1981). Cohesive statements make more explicit what is otherwise left to the reader's inferential powers. It is an unfortunate fact of life, however, that textbooks are not always written coherently. Consequently, students are forced to infer relationships on their own. The ability to link ideas in a disjointed text may be enhanced by helping students recognize and manipulate structures of cohesion. The instructional strategy described in this paper is one way to translate recent research on the salutory effects of linguistic connectives into classroom applications. The author believes that giving students the opportunity to create cohesive statements will lead to growth in syntactic maturity and metalinguistic awareness.

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APPENDIX

A List of Connectives

then	another	finally
moreover	besides	next
also	in addition	furthermore
likewise	as well as	and
for this reason	in order to	since
because	so that	therefore
hence	thus	consequently
accordingly	as a result	so
soon	at last	now
at that time	subsequently	until
while	meanwhile	already
after	during	afterwards
in the meantime	even though	but
however	yet	otherwise
although	on the contrary	nevertheless
on the other hand	notwithstanding	rather
in spite of	in comparison	that
by this time	instead	even so

A Cloze Passage with Missing Connectives

The Battle of Antietam Creek

America was well into the Civil War, (1)_____many battles had been faught between North and South. (2)_____no battle was bloodier nor more puzzling than the Battle of Antietam Creek. General George B. McClellan was the commander of the Union Army of the Potomac. He was chasing General Robert E. Lee's Confederate Army in Maryland. On September 13th, and odd thing happened. Mclellan s army was near Frederick, Maryland (3)_____ one of his soldiers, Private Barton Mitchell, found three cigars wrapped in a piece of paper lying in a field. The paper turned out to be an order signed by General Lee entitled "Special Orders 191." The orders instructed Lee's generals to split their army into four parts. Generals almost never split up their army in the face of the enemy (4)_____each part is mall and weak by itself. (5)_____the order must have seemed unusual to

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Mclellan. McClellan was by nature a suspicious man. (6)_____ _____ _____., he must have thought that Lee was trying to trick him by planting a fake order where Union soldiers would find it. If you look at McClellan's actions over the next few days, he certainly behaved as if he thought Lee was trying to trick him. Three days later, on September 16th, McClellan tracked down Lee's army at the town of Sharpsburg near Antietam Creek. (7)_____ _____ _____ all but one of Lee's four units had rejoined him, (8)_____ he was nearly ready for battle. (9)_____ ___, Lee's forces were still badly outnumbered. (10)_____ still McClellan did not attack. He waited on more day on the excuse (11)_____ there were so few troops facing him that hethought Lee had already retreated. (12)_____ it was not until the morning of September 17th that he attacked Lee's Confederates in a large cornfield. (13)_____ _____ _____, of course, the Confederates had set up many cannons with which they killed thousands of McClellan's men. Halfway through the morning, the battle reached an old roadway in the middle of the field. This road later became known as Bloody Lane (14)_____ so many soldiers were killed there. (15)_____, another battle was beginning on the banks of Antietam Creek. This creek had only a single-lane arched bridge for all the soldiers to get across. (16)____ ____ _____ _____, it was only about 50 feet wide and only waist deep. General Ambrose Burnside was on one side of the creek with 10,000 Union troops. On a hill on the other side of the creek were a mere 500 Confederate soldiers who were shooting down at Burnside's helpless men. Burnside was supposed to cross the creek in the morning and take the hill. He would

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(17)_____ have been able to go to the aid of General McClellan's troops. If he had, it would probably have ended the battle and the Civil War as well. (18)_____, Burnside wasted hours wondering how his troops could get across the small bridge. He did not realize that they could have easily waded across the creek. By the time he managed to get enough men across the bridge to drive the Confederates from the hill, General Lee's fourth group had arrived (19)_____ he had set up a strong battle line. (20)____, by the end of the day, while very little ground had changed hands, 25000 Americans were dead. It was the bloodiest day of fighting in American history. The next day, there was no fighting (21)_____ both armies were exhausted. (22)_____, McClellan still had thousands of men in reserve who had not yet fought. Why did he not use them against Lee's battered army? Apparently he was still suspicious. (23)_____, the Confederate army was able to slip away during the night (24)_____ the war continued for three more bloody years.

Answers to Cloze Exercise

1. and	2. But	3. when
4. because	5. So	6. As a result
7. By that time	8. so	9. Even so
10. But	11. that	12. Thus
13. By this time	14. because	15. Meanwhile
16. On the other hand	17. then	18. Instead
19. and	20. So	21. because
22. However	23. Consequently	24. and

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